





SANITARY SURVEILLANCE ACTIONS IN OUTBREAK OF IMPETIGO: EXPERIENCE REPORT

AÇÕES DE VIGILÂNCIA SANITÁRIA EM SURTO DE IMPETIGO: RELATO DE EXPERIÊNCIA

Fabiana Silva **Machado**¹ , Karoline Ferreira de **Carvalho**² , Gabriela Camargo **Tobias**¹ ,
Cristiane Chagas **Teixeira**^{2*} 

¹Secretaria Municipal de Saúde de Senador Canedo, GO, Brasil.

²Universidade Federal de Goiás, Goiânia, GO, Brasil.

*cc-teixeira@hotmail.com

ABSTRACT

The Health Surveillance is responsible for risk prevention actions and health interventions resulting from the environment, the production and circulation of goods, and the control of service provision, including the control of consumer goods and production processes that relate to health. The objective of the study was to report the actions have taken by the Health Surveillance in the outbreak of impetigo in the child population (from zero to five years old) who use Municipal Centers for Early Childhood Education. This is a descriptive study, by experience report type, using documentary research as a data collection technique, in the coordination of Epidemiological and Sanitary Surveillance in the municipality of Senador Canedo, Goiás, Brazil. The outbreak of impetigo occurred in November and December 2018 and the data collection for research occurred in the period from September to November 2019. Articulated actions of guidelines regarding hygiene and disinfection measures to those involved in an outbreak of impetigo are fundamental for adequate control and management. Sanitary activities must be based on the protection and defense of individual and collective health.

Keywords: Health Surveillance. Impetigo. Public Health Surveillance.

RESUMO

A Vigilância Sanitária é responsável por ações de prevenção de riscos e intervenções sanitárias decorrentes do meio ambiente, da produção e circulação de bens e controle da prestação de serviços, incluindo o controle de bens de consumo e, processos da produção que se relacionam com a saúde. O objetivo do estudo foi relatar as ações tomadas pela Vigilância Sanitária no surto de impetigo na população infantil (de zero a cinco anos), usuária de Centros Municipais de Educação Infantil. Trata-se de um estudo descritivo, do tipo relato de experiência, utilizando como técnica de coleta de dados a pesquisa documental, nas coordenações de Vigilância Epidemiológica e Sanitária do município de Senador Canedo, Goiás, Brasil. O surto de impetigo ocorreu no mês de novembro e dezembro de 2018 e a coleta de dados para pesquisa ocorreu no período de setembro a novembro de 2019. Ações articuladas de orientações quanto as medidas de higiene e desinfecção aos envolvidos em surto de impetigo são fundamentais para controle e manejo adequado. As atividades sanitárias devem estar pautadas na proteção e defesa da saúde individual e coletiva.

Palavras-chave: Impetigo. Vigilância em Saúde Pública. Vigilância Sanitária.

INTRODUCTION

The Sanitary Surveillance - VISA is responsible for risk prevention actions and sanitary interventions arising from the environment, production and circulation of goods, and control of the provision of services, including the control of consumer goods and, production processes that relate to health (BRASIL, 1990; SILVA; COSTA; LUCHESE, 2018).

Within the VISA work process, there are several actions, some more recognized than others, being the standardization, product registration, surveillance, monitoring of products, services and market, guidance, education, and investigation of outbreaks and diseases (UFC, 2015).

The outbreak is defined as an unusual increase in the number of epidemiologically related cases of sudden onset and localized dissemination in a specific space (OPAS, 2010). The VISA action in the investigation of outbreaks and diseases aims to identify the causative agent or the origin of the harmful event and adopt control and prevention measures. It consists of acting in outbreaks related to the consumption of food, medicines, use of services, and health technologies, related to the environments and work processes (BRASIL, 1990).

There are descriptions about VISA's action together with services of Epidemiological Surveillance in cases related to products subjected to sanitary control, such as blood bags and blood products, in the case of transmission of human immunodeficiency virus, food as in outbreaks of hepatitis A and E, acute diarrheal diseases, leptospirosis and botulism (MINISTERIO DA SAÚDE, 2009a; 2017).

Impetigo is a superficial bacterial infection (PIRES *et al.*, 2015), observed most frequently in children, and there are *Staphylococcus aureus* and group A beta-hemolytic *Streptococcus* as its main agents. The inoculation is facilitated by abrasions, insect bites, and trauma. This disease can be featured as bullous or non-bullous type (MINISTERIO DA SAÚDE, 2013a). Although it is not a disease of compulsory notification and does not have severity, it is relevant to define conducts in outbreak situations (MINISTERIO DA SAÚDE, 2002).

From this context, the objective of this study was to report the actions taken by the Health Surveillance in the outbreak of impetigo in children (zero to five years old) who use Municipal Centers for Early Childhood Education.

EXPERIENCE REPORT

This is a descriptive study, the type of experience report, using as a technique of data collection the documentary research, using official documents such as memos, letters, collection of verbal information from servers involved in the outbreak in the coordination of Epidemiological and Sanitary Surveillance in the city of Senador Canedo, Goiás, Brazil.

Senador Canedo is a municipality belonging to the metropolitan region of Goiânia, Goiás, Brazil, with the following geographical coordinates - latitude (south) - 16° 42'29" and longitude (west) - 49°05'35" (PREFEITURA DE SENADOR CANEDO, 2021), bordered by the municipalities of Aparecida de Goiânia, Bela Vista de Goiás, Bonfinópolis, Caldazinha, Goianópolis, Goiânia and Leopoldo de Bulhões. It has an urban area of 248.291 Km² and approximately 102,947 inhabitants.

The outbreak of impetigo occurred in the month of November 2018 and data collection for research occurred in the period from September to November 2019.

This study was conducted from data that does not identify the cases included in this research and, therefore, was not submitted to any Research Ethics Committee.

According to documents issued by the cited agencies and reports from the people involved, a description of the actions related to the outbreak epidemiological investigation adopted by the municipality was created, namely:

On November 08, 2018, the Department of Health Surveillance - VISA became aware by phone of the occurrence of cases of skin lesions in several children and employees in a public network

called Municipal Center for Child Education - CMEIs. On this day, a Public Health inspector visited the site to verify and collect information.

At the place, the manager stated that, about 10 (ten) days ago, a child presented spots and itching on the body and these spots evolved into sores and, in a few days, other children presented the same symptoms. The institution advised that parents and guardians of sick children should take them to the health unit for diagnosis and treatment. The manager also reported that one of the mothers of a child affected by the lesions had already taken her son to a health unit and that a diagnosis of impetigo had been made. In addition to the report, the Public Health inspector had access to photos of the lesions on some children.

The Public Health inspector gave immediate verbal instructions about the importance and need to clean rooms and objects. With the photos, the inspector went to an emergency care unit near the site and requested an analysis from the doctor on duty, who reported that the skin lesions were compatible with impetigo. On the same day, the inspector also verbally informed the Epidemiological Surveillance Department about the situation.

That started the evaluation and implementation of preventive measures regarding the cases. The acting team was composed of two Public Health inspectors from the Health Surveillance, a doctor from the health secretary, a nurse from the Epidemiological Surveillance Department, director and supervisor of Health Surveillance. The doctor performed anamnesis on children with signs and symptoms and made a clinical diagnosis of impetigo. The Epidemiological Surveillance department called the nearest Family Health Program (FHP) unit and instructed that all children with these characteristics should be referred to the FHP with priority in care by the unit. The VISA gave a verbal orientation about the cleaning and disinfection of environments and objects, in addition to informing about the need to avoid contact of children with lesions with others without symptoms. An alert note was prepared and sent to the education department, and sodium hypochlorite was made available from that agency to perform the disinfection.

Between November 13, 2018, and December 7, 2018, the disease spread to other school institutions in the municipality, with new cases being reported in twenty (20) different children's educational institutions, involving a total of twenty-one (21) educational institutions, one of which was an index case.

Due to the increased incidence, VISA has prepared a written document with recommendations for the use of sanitizers for disinfection. The document contained definitions about disinfection, sanitizers used, and how to use them to guarantee an adequate process.

A progressive reduction of cases was noticed from epidemiological week 48 (November 25, 2018, to December 1, 2018). At the conclusion, there was notification of 178 suspected cases, being confirmed by clinical-epidemiological criteria a total of 165 cases.

The actions developed by VISA, specifically, were described in Chart 1.

Chart 1 - Health Surveillance actions related to the outbreak of impetigo in Municipal Centers for Child Education - CMEI in the municipality of Senador Canedo, Goiás, Brazil, 2018

Date	Found Situation	Measure(s) Taken
08/11/2018	VISA is aware of probable cases of impetigo (telephone contact).	Fiscal visit. Verbal orientation not to receive sick children and referral to the health unit. Guidance about hygiene of the environment.
09/11/2018	In loco visit with field team.	Verbal orientation about hygiene. Emission of alert note.
29/11/2018	Issuance of recommendation for use of sanitizers for disinfection.	Document with information about the types of sanitizers used for disinfection (alcohol 70%, sodium hypochlorite 1%), operational procedures regarding the form of use.

Source: the authors.

DISCUSSION

The inspections commonly performed by VISA in schools and daycare centers are characterized by the guiding and forming character of a sanitary conscience, acting to improve the conditions of organization and operation of these establishments, aiming at promoting and maintaining the health of these communities, preventing outbreaks and transmission of contagious diseases (EDUARDO, 1998; SILVA; MATTÉ, 2009; RUWER; MAINBOURG, 2015).

There is, therefore, the traditional conception of the role of VISA in the control before the occurrence of any grievance, of factors that directly or indirectly may constitute a risk to an individual or collective health (ROZENFELD, 2000). However, it is necessary to advance more on the role of VISA in disease control.

The reported case brings reflection on the need to think about VISA actions within the context of SUS and the protection of the population's health. The institutional model of VISA confirmation in Brazil kept its actions isolated from other health actions in other sectors, with which it is related, reducing its practices only to inspection and normative function (COSTA, 2009a).

The VISA is provided as a component of Health Surveillance since the Ordinance GM No. 3.252/09 and, currently, in force the Ordinance No. 1.378/13 (MINISTÉRIO DA SAÚDE, 2009b; 2013b).

Therefore, it is necessary to think about the coordination of Epidemiological and Health Surveillance actions within this concept as a way to achieve completeness, including with defense by some authors the non-institutionalization in Epidemiological and Health Surveillance (SETA; REIS; PEPE, 2011).

However, it is known that this integration is still a challenge (MINISTÉRIO DA SAÚDE, 2009b). And, recognizing joint actions, as described in this report, reinforces the character of prevention in a comprehensive way in the onset of diseases in the community.

The fact that the initial identification of the occurrence of the outbreak was made through information from the contact with the person responsible for the place with the body of VISA, demonstrates that the agency fulfilled the proposed objective in the supervision of this type of establishment because it shows an awareness on the part of those involved with the institution, acting timely with verification of abnormal increase of children with the same symptoms.

Despite the recognition in the literature of VISA actions in the investigation of outbreaks, its action is related to foodborne diseases - STDs or diseases with water transmission (water supply), having guides from the Ministry of Health subsidizing their action (BRASIL, 2006; 2010). It is perceived, therefore, a gap in knowledge about the specific performance of VISA in the adoption of control measures in the emergence of diseases in the community.

In the reported case, it was possible to verify the actions taken by VISA, focusing on orientations about the rigorous hygienization and hand washing, fundamental attitudes to face the outbreak of impetigo (MINISTÉRIO DA SAÚDE, 2002). It is noteworthy that VISA has made a survey related to sanitizers available in the health department to train those involved in cleaning and disinfection in a correct way.

The outbreak investigation basically occurs through ten steps, as follows: I) determining the existence of the outbreak; II) confirmation of diagnosis; III) definition and counting of cases; IV) descriptive epidemiology (time, place, and person); V) determination of who is at risk of becoming ill; VI) hypothesis raising; VII) comparison of hypotheses with established facts; VIII) refinement of hypotheses and further studies; IX) control and prevention measures; X) communication of the results of the investigation (MINISTÉRIO DA SAÚDE, 2018).

Although the study design - Experience Report - is considered inferior in relation to the level of evidence of other types of studies, it becomes relevant in innovative ways of approaching diseases (OLIVEIRA *et al.*, 2015).

Among the limitations of the study, although the proper fulfillment of the epidemiological investigation steps is not the focus of this experience report, it is important to highlight that it was not

possible to have access to all the documents that would evidence the proper completion of these steps, due to the absence of information of descriptive and analytical epidemiology on the outbreak investigated. It is not possible to affirm whether there were failures or not in its contingency. Moreover, it was not used as a formal instrument to collect data from servers involved in the outbreak.

CONCLUSION

The Health Surveillance actions present diversified fields of action, which generates the perspective of sharing competence with other agencies and/or sectors. The investigation of an outbreak is an example of this situation.

This experience report consisted of actions related to orientations about hygiene and disinfection measures to the people involved in an outbreak of impetigo in schools. This action, being fundamental for the control and proper management of the outbreak, demonstrates the need of the development of articulated actions and a change in the focus of sanitary activities, based on the protection and defense of individual and collective health.

Furthermore, this study highlights two situations. The first is the reflection on the need to think VISA actions under the optics of the doctrinal principles of SUS, among them, the integrality. Another reflection is about concrete examples of VISA and Epidemiological Surveillance actions together, showing concomitantly relevant activities.

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